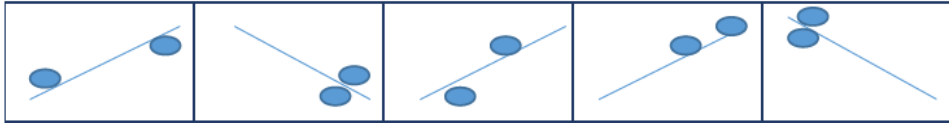


Abstract Reasoning

Workbook



NAME

Abstract Reasoning Test

Abstract or Logical or Inductive reasoning tests are the same names for the same type of aptitude test. They are all designed to assess your ability to think in a strategic manner, solve problems and work with partial information. The tests use diagrams, symbols or shapes instead of words or numbers. They involve identifying the logic of a pattern and then determining the solution. Because they are visual questions and are independent of language and numerical ability, they are considered to be an indicator of your general intellectual ability.

Excel and shine among others in your aptitude tests with the help of this workbook. Learn alone by identifying patterns by choosing the best that completes the rest of the figures or strike the one that is not part of the pattern. If you haven't taken this kind of test for a long time, this will surely add to your stress and nervousness. Take time to practice, maybe 30 minutes a day and it will surely influence your score.

Questions tend to involve the repetition or change of the following:

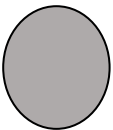
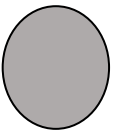
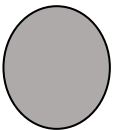
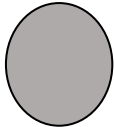
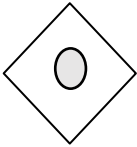
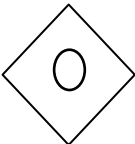
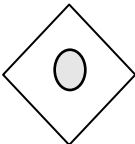
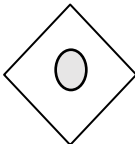
- Shapes
- Sizes
- Patterns
- Symbols
- Letters
- Numbers
- Combinations of those mentioned above

Patterns that you should remember.

Repetition of Shapes

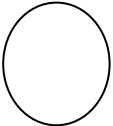
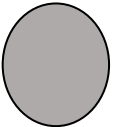
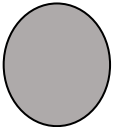
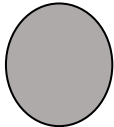
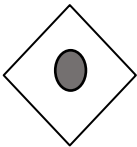
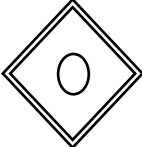
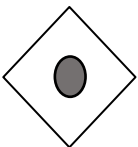
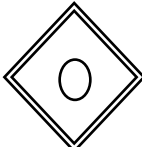
The same shape or figure

The second figure of the last row is different from the rest.

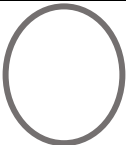
Alternating shapes or figures

The second row of figures did not show correct sequence, the third object was incorrect

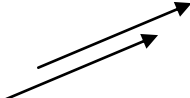
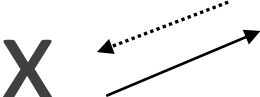
Increasing or decreasing in size

The first row does not show increasing or decreasing size of triangles.

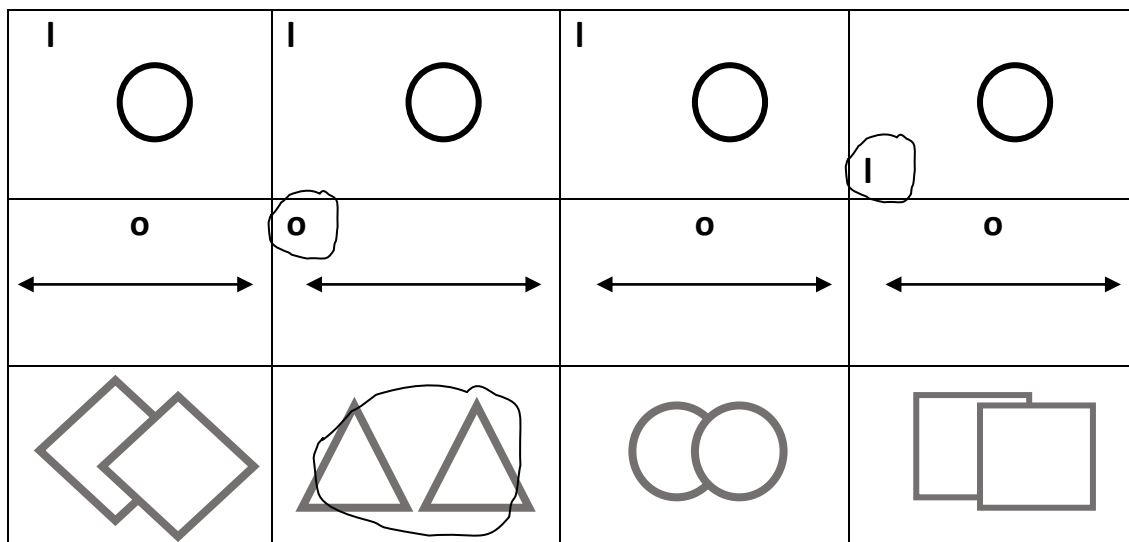
			
			
			

Pair of figures

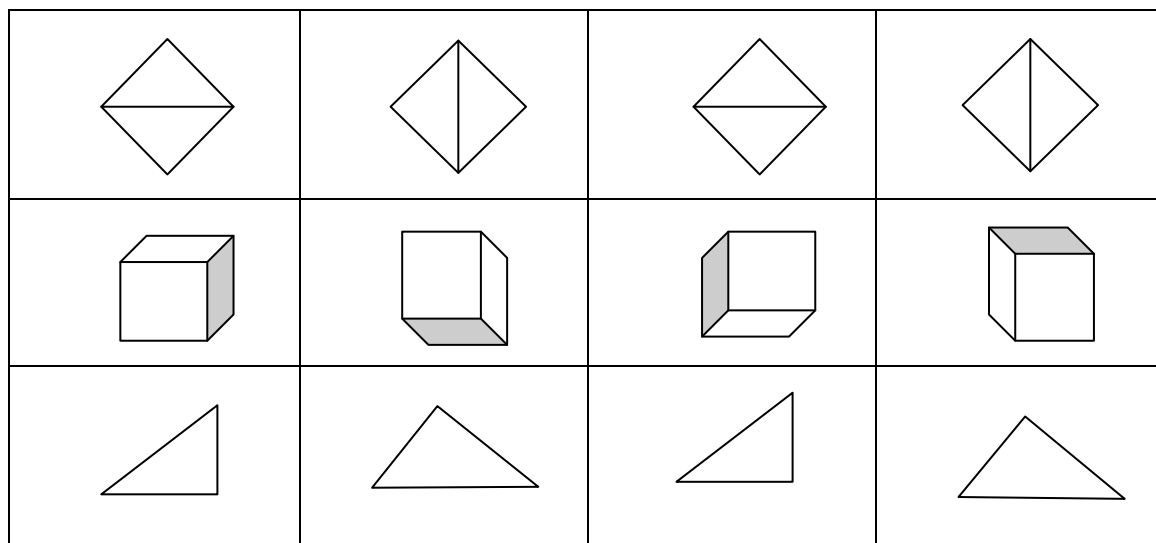
The second pair of lines is different from the other pairs.

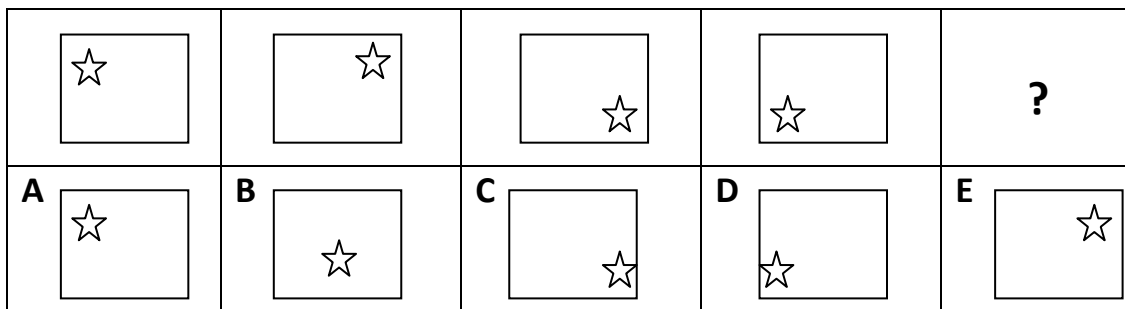
**Position of a particular object in reference to another object.
Encircled figure makes it the one odd out.**



**Movement of figures. Rotation or Reflection.
First and second rows are 90 degrees rotation.
Third row are all 180 degrees.**

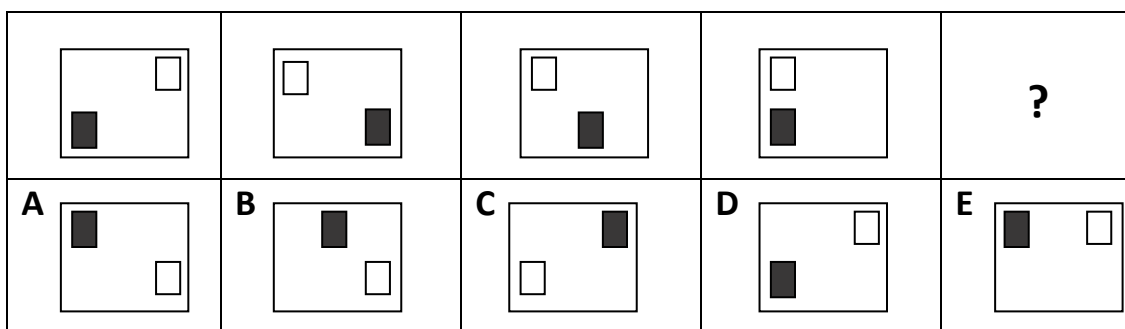


What is the missing figure?



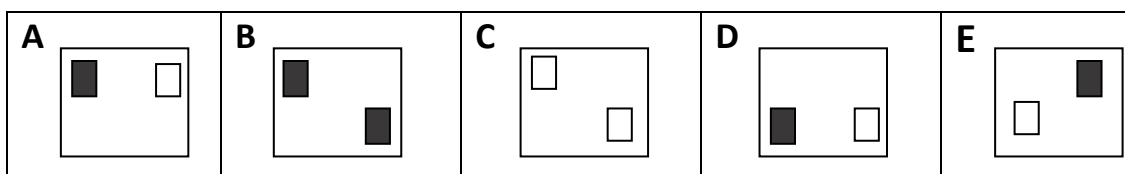
Answer: A. The star rotates clockwise.

What is the missing figure?



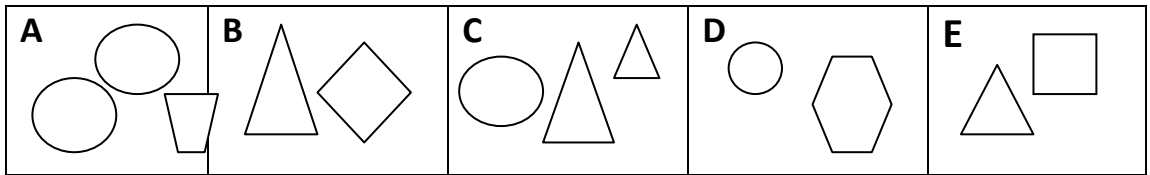
Answer: D. White tiles are on top, black tiles are at the bottom.

Which figure does not belong to the group?



Answer: E. The same tiles are on opposite sides, different colors are together on top or at the bottom.

Which figure does not belong to the group?



Answer: A. All sides of the figures sum up to 7, figures in A is 6.

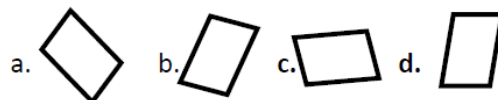
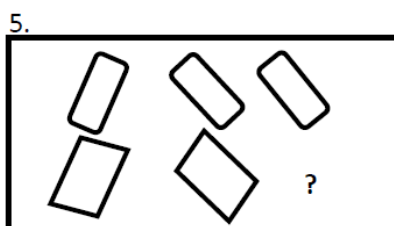
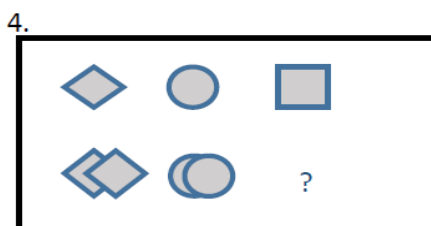
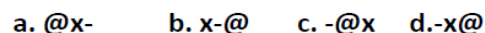
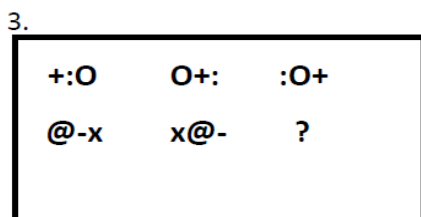
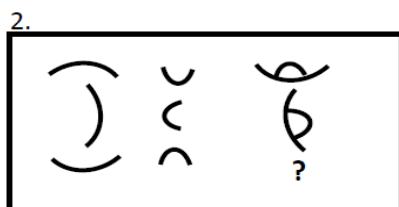
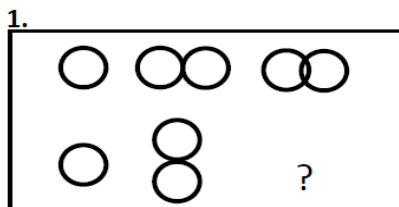
You may try answering the tests now. Try to answer this workbook over and over again to familiarize yourself with the questions and techniques. The answers are at the end and explanations are also provided.

TEST I

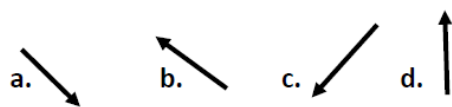
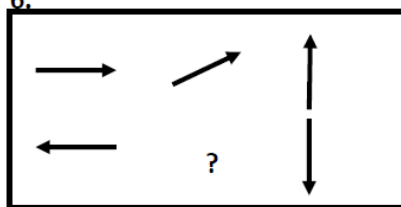
In this test, the drawings or symbols are patterned inside the boxes. Find the missing drawing that will complete the series.

-This is a 20-item test and you are typically given around 5 seconds to complete each test question Try to take the test for 1 and 1/2 minutes

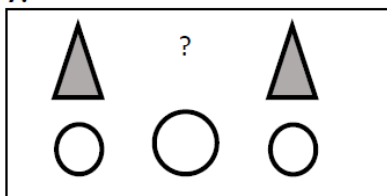
The drawings and symbols inside the boxes go together in a certain way. Find the drawing that belongs where you see the question mark (?) in the box.



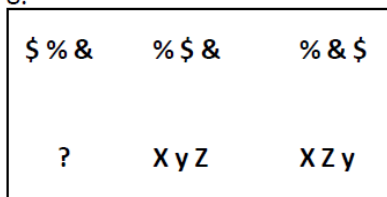
6.



7.

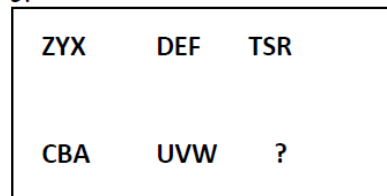


8.



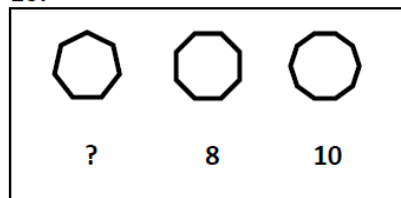
a. Z X y b. y Z X c. Z y X d. y X Z

9.



a. RST b. GHI c. OPG d. IHG

10.



a. 5 b. 6 c. 7 d. 4

A. The sets of symbols/letters in the first part of the row go together to form a series. In the last part of the row, find the set of symbols/letters that belongs where you see the question mark (?) in the series.

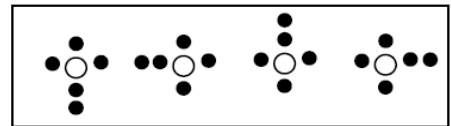
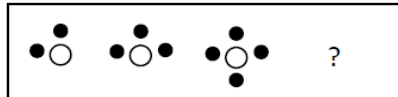
11.

X	M	X	M	
LCT	TLC	CTL	LCT	?
M	X	M	X	

X	M	X	M
TLC	TLC	TCL	TCL
M	X	M	X

a b c d

12.



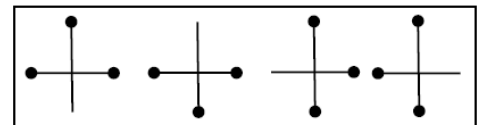
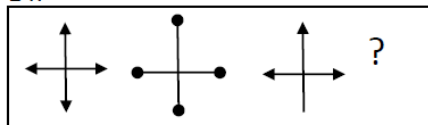
a b c d

13.



a b c d

14.



a b c d

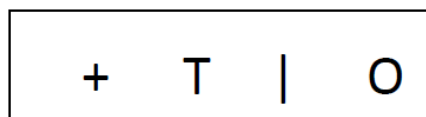
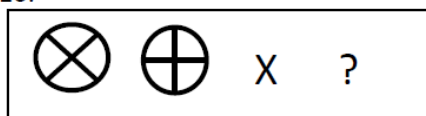
15.

aaXX	BBYY	?
△	□	

ccZZ	cczz	CCzz	CCzz
△	◡	□	○

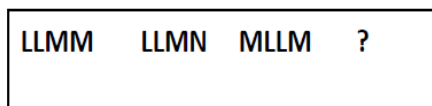
a b c d

16.



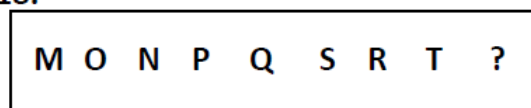
a b c d

17.



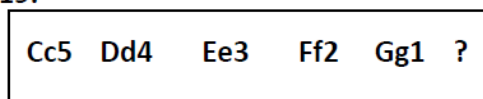
a. LLNM b. MNLL c. NLLM d. MLLN

18.



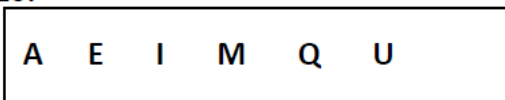
a. U b. V c. W d. X

19.



a. Hh b. Bb1 c. Hh2 d. Bb0

20.



a. V b. Y c. X d. W

TEST II

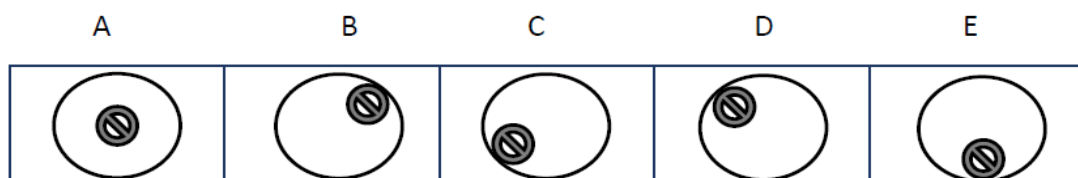
In each set of 5 drawings, ONE drawing is DIFFERENT from the others.

Locate the ONE drawing that is DIFFERENT by writing down the letter assigned to the picture. This is a 30-item test and you are typically have around 8 seconds to complete each test question

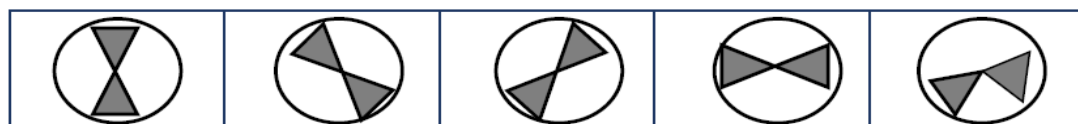
- Take this test for 4 minutes

- The time limit and the level of difficulty are defined and only 1-5% of the population can correctly solve all the test questions within the time frame provided. Therefore, it is not expected for everyone to finish the test within the time frame, and so, it is okay for you to not finish it.

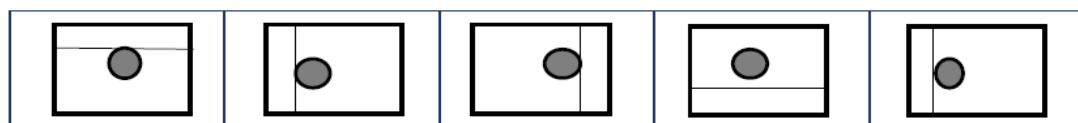
1



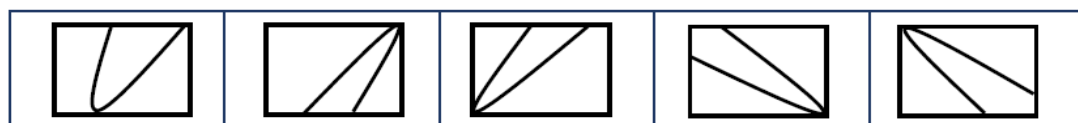
2



3



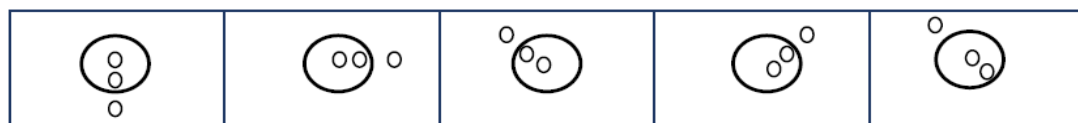
4



5



6



7

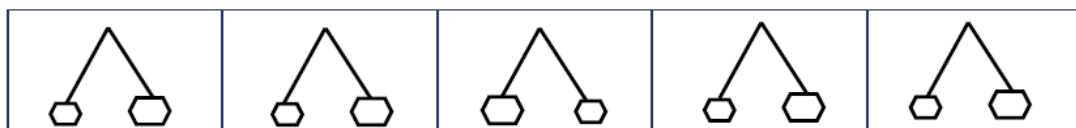
A

B

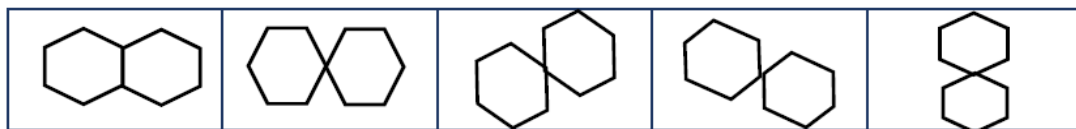
C

D

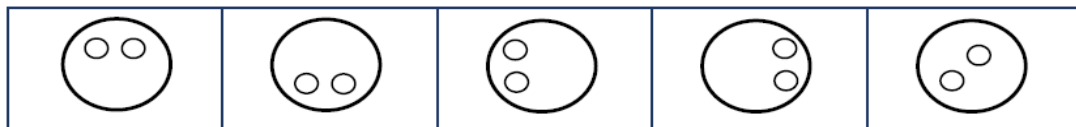
E



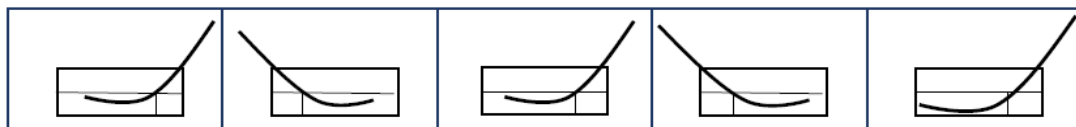
8



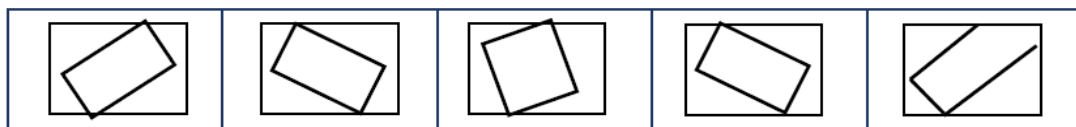
9



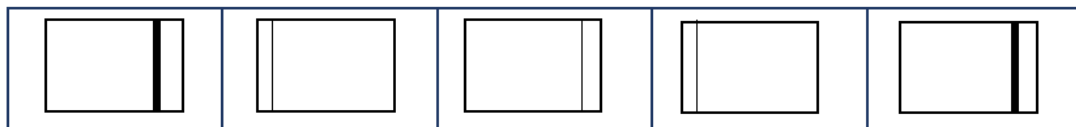
10



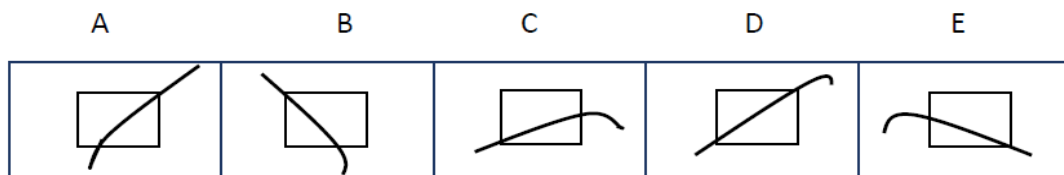
11



12



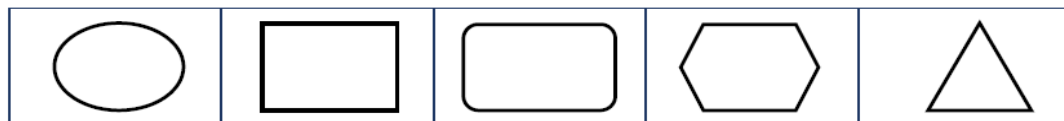
13



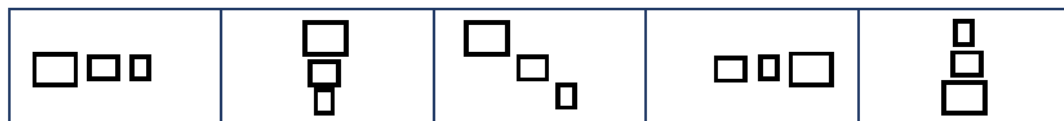
14



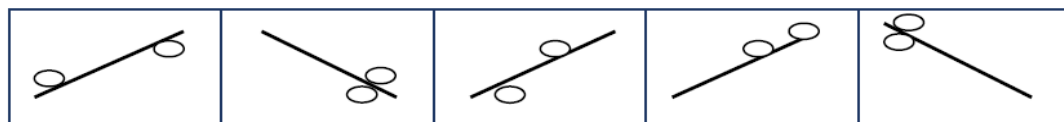
15



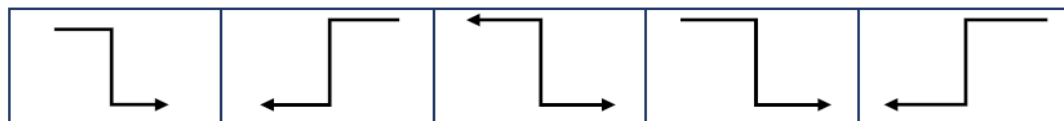
16



17



18



19

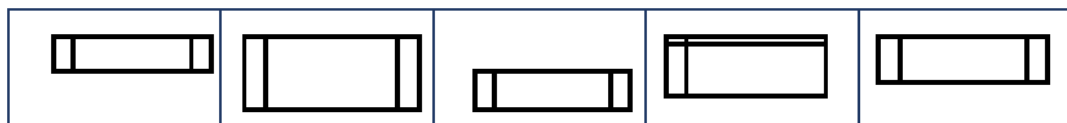
A

B

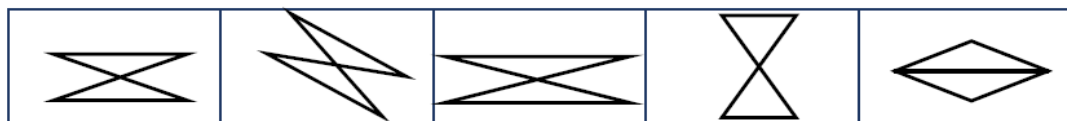
C

D

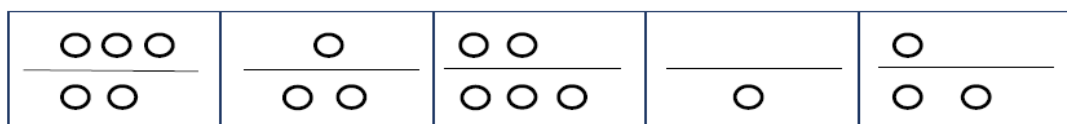
E



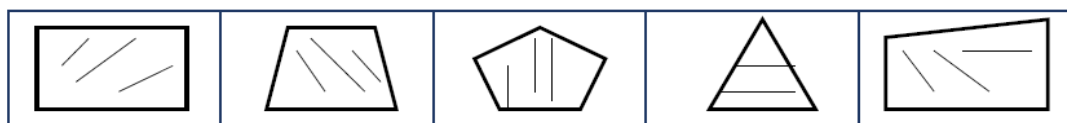
20



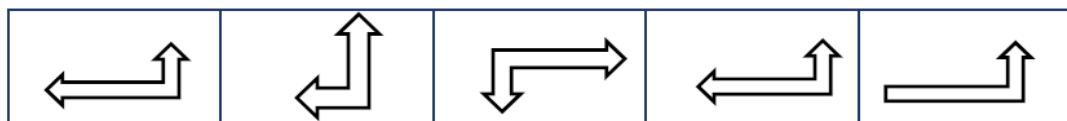
21



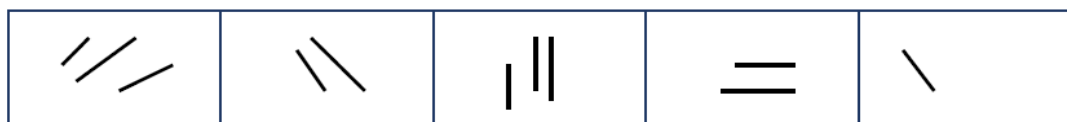
22



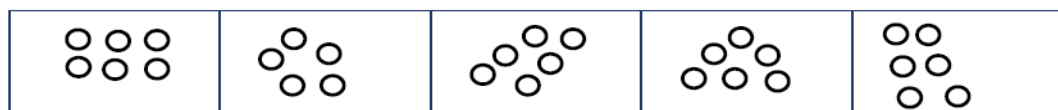
23



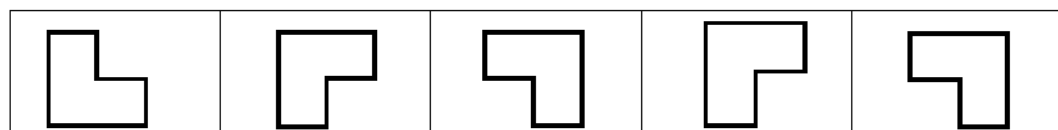
24



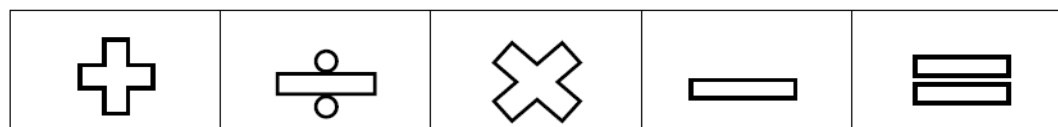
25 A B C D E



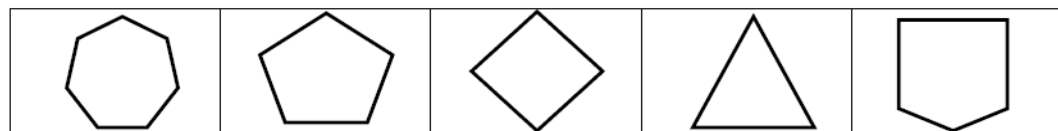
26



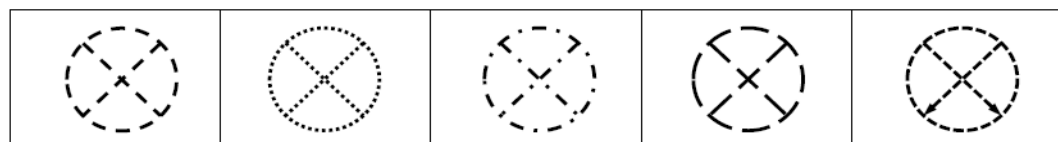
27



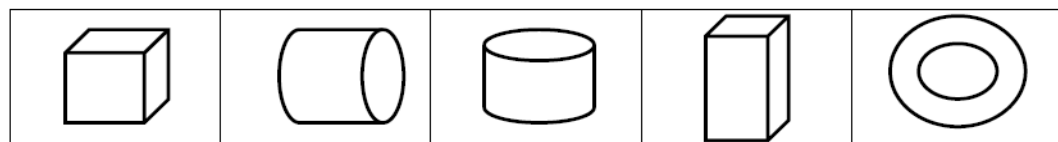
28



29



30



TEST III

The first ten numbers are completing the series, locate from among the options labelled with A to D the next or the fifth figure in the figure series on the left.

The next ten questions are finding the missing pair of a figure. It is similar to word analogy.

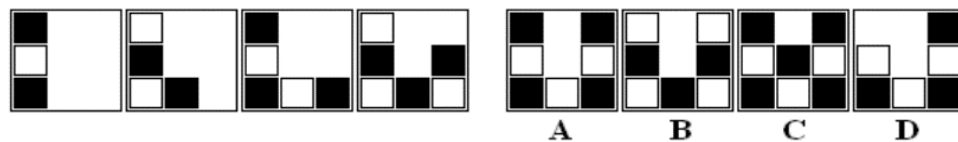
The other ten questions are finding which figure DOES NOT belong to the other figures or pattern and the last set of questions is another completing patterns of figure. Patterns could be rotations of figures or reflections.

This is a 40-item test and you are typically given around 15-20 seconds to complete each question. Take this test for 15 minutes.

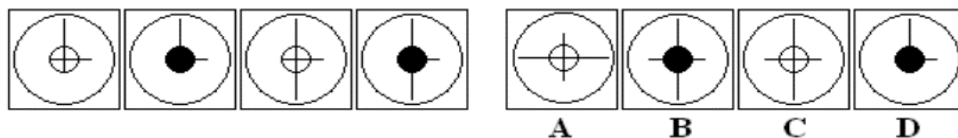
The time limit and the level of difficulty are defined and only 1-5% of the population can correctly solve all the test questions within the time frame provided. Therefore, it is not expected for everyone to finish the test within the time frame, and so, it is okay for you to not finish it within the time frame.

Which figure completes the series?

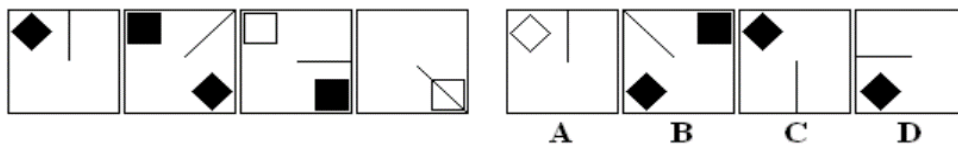
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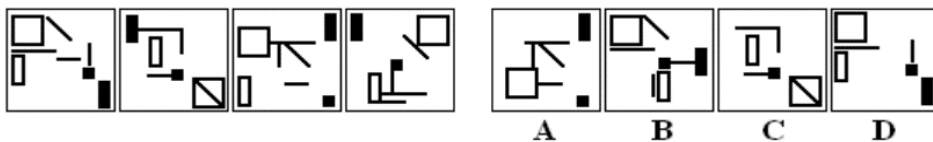
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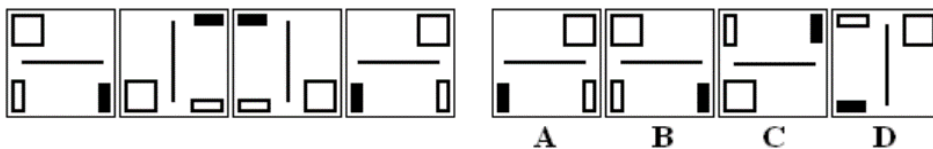
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4



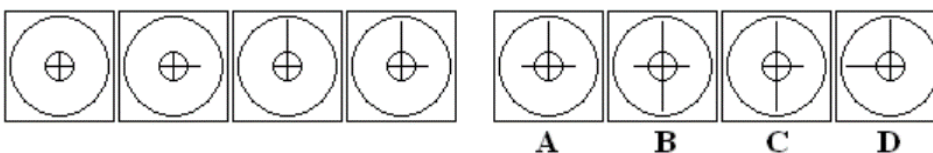
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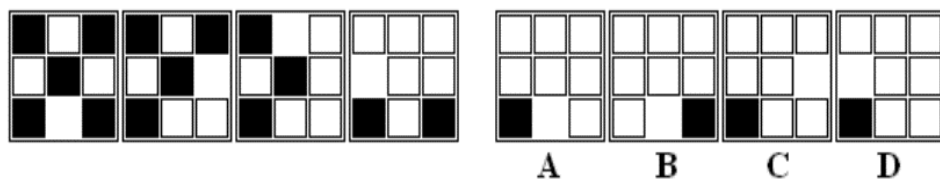
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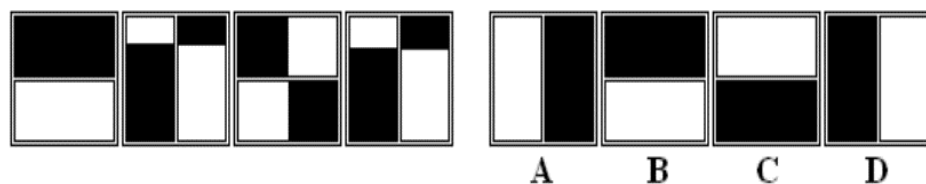
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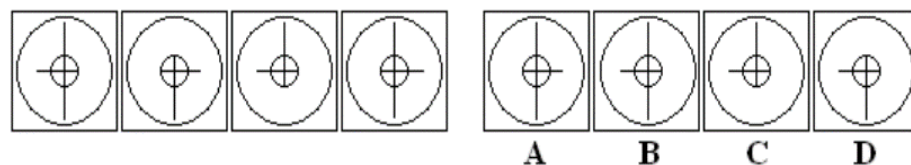
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9

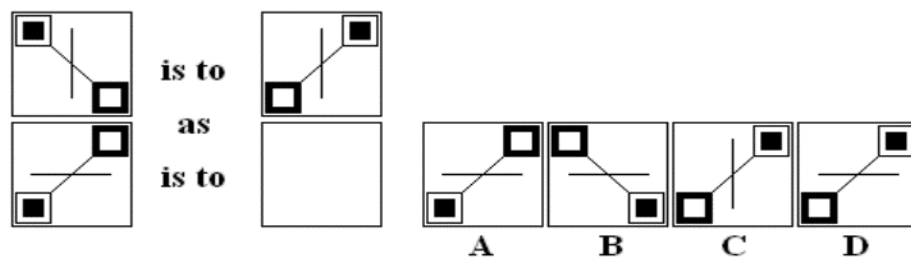


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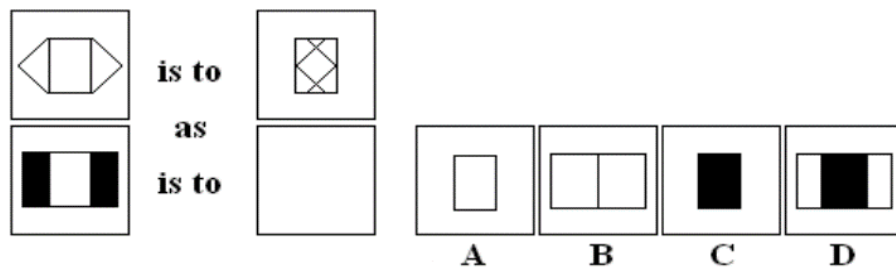


Which figure completes the statement?

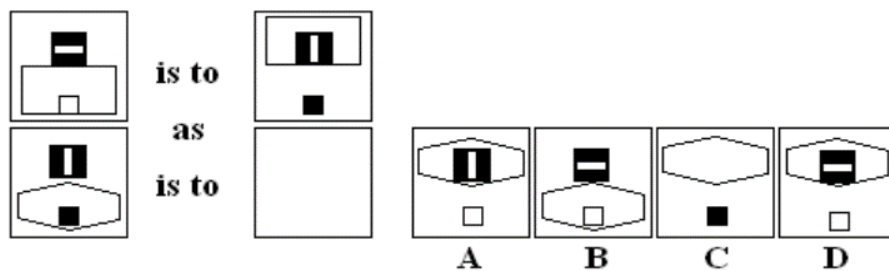
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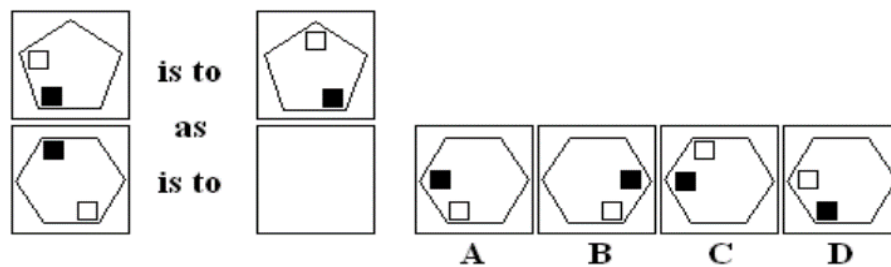
12



13



14



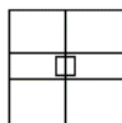
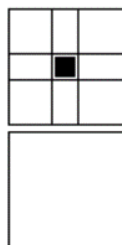
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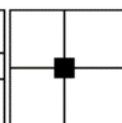
is to

as

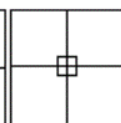
is to



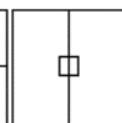
A



B

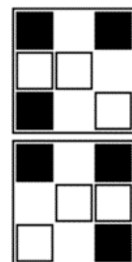


C



D

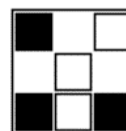
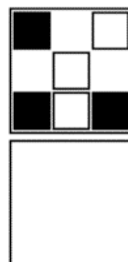
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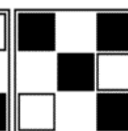
is to

as

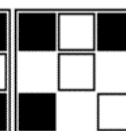
is to



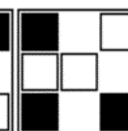
A



B

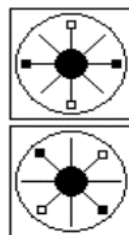


C



D

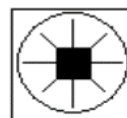
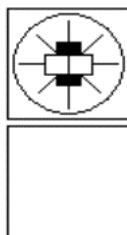
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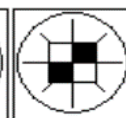
is to

as

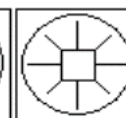
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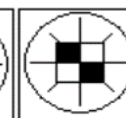
A



B

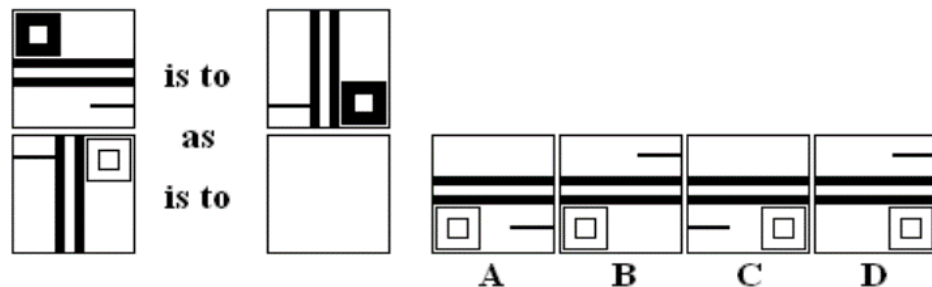


C

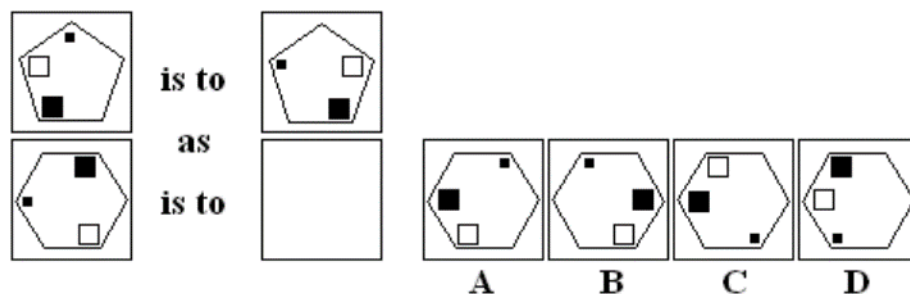


D

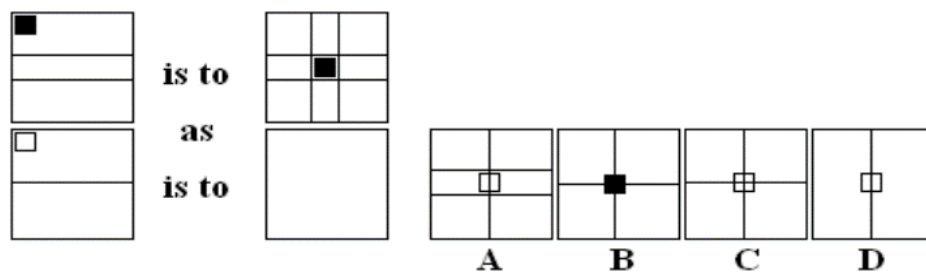
18



19

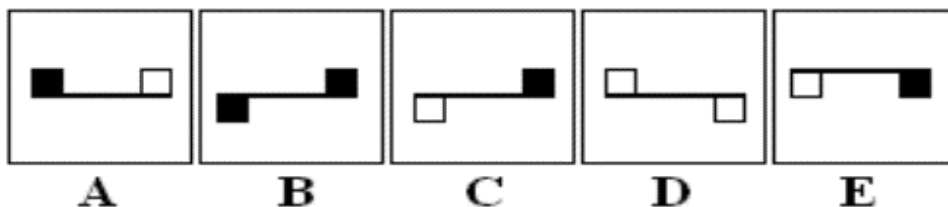


20

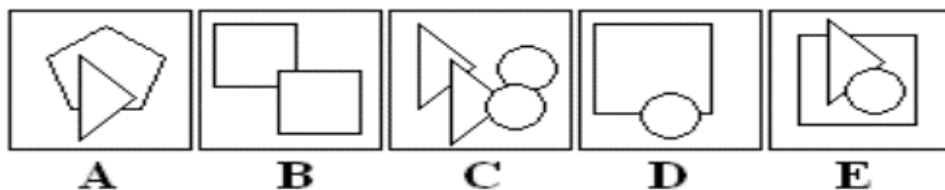


Which figure DOES NOT belong to the group?

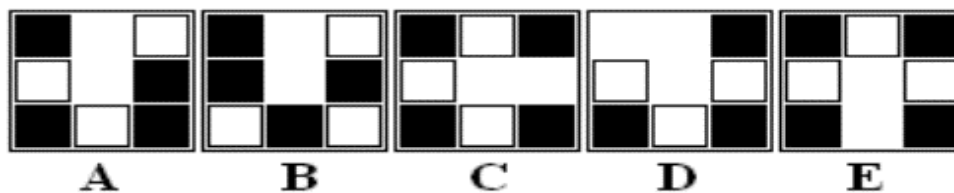
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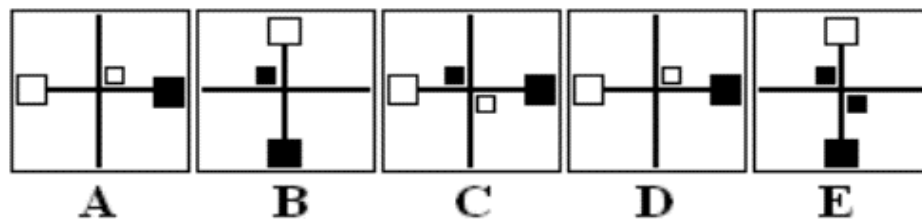
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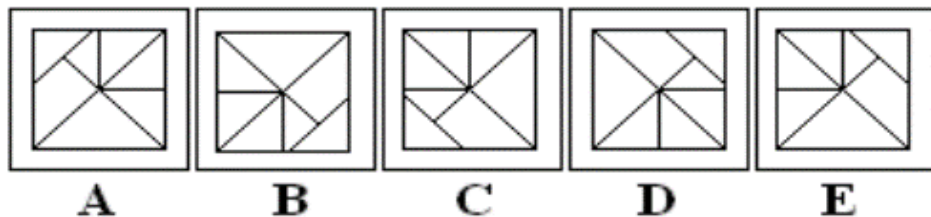
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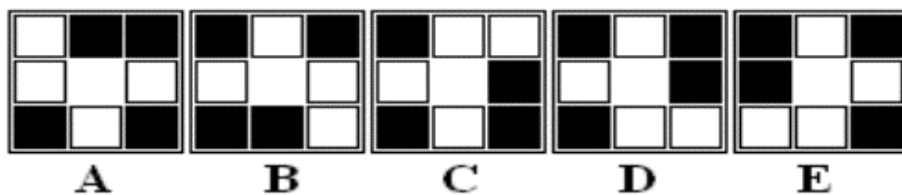
24



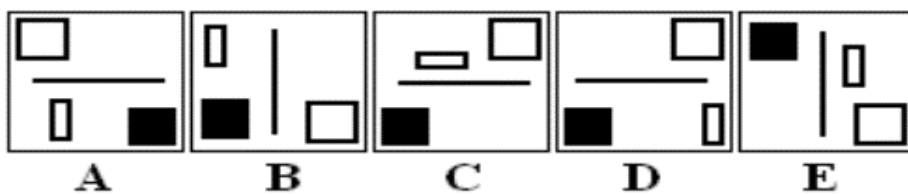
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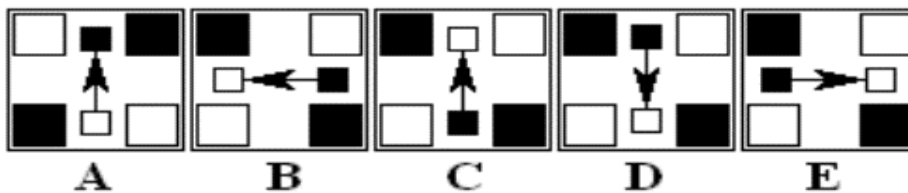
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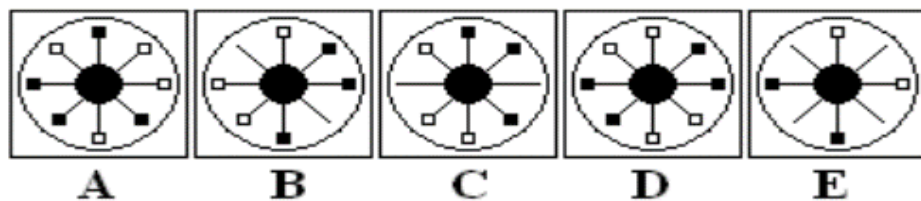
27



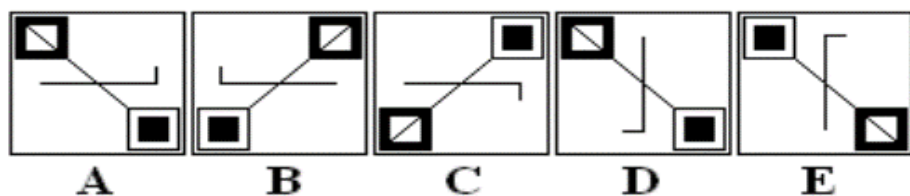
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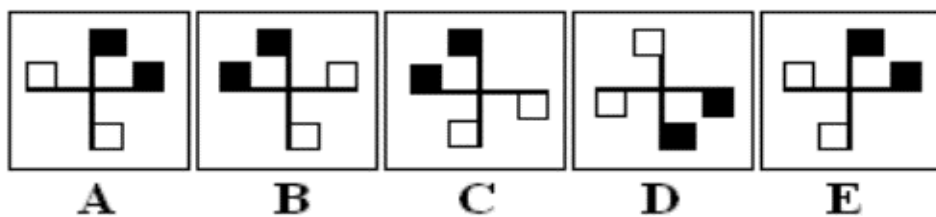
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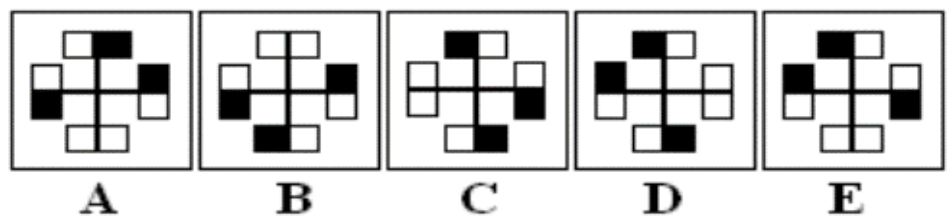
30



31

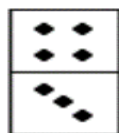


32

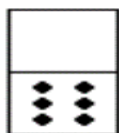


Which figure is NEXT in the series?

33



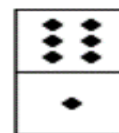
A



B

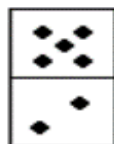
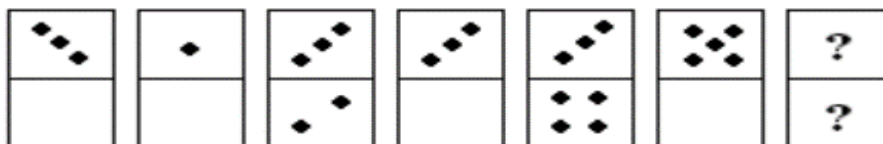


C

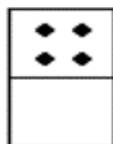


D

34



A



B

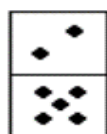
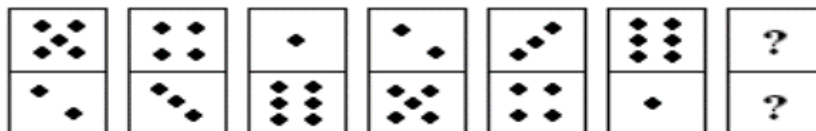


C

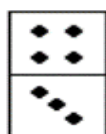


D

35



A



B

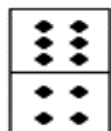
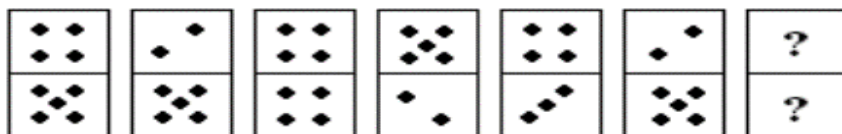


C

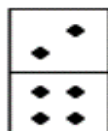


D

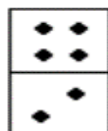
36



A



B

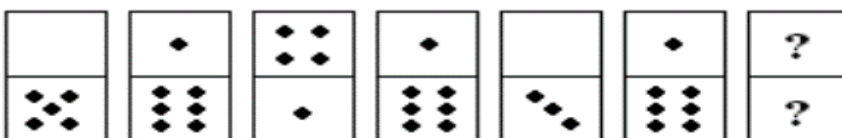


C

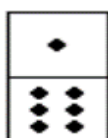


D

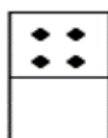
37



A



B

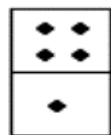
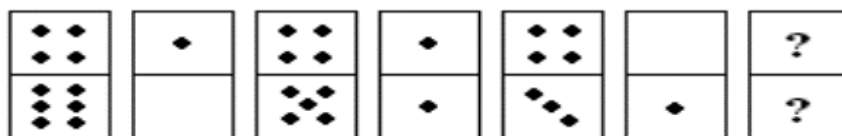


C

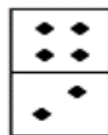


D

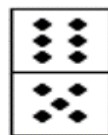
38



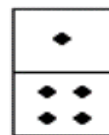
A



B

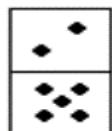
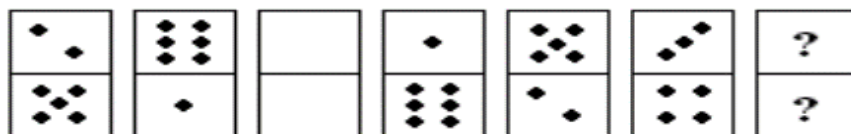


C

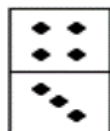


D

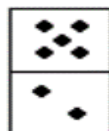
39



A



B

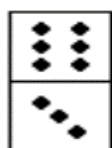
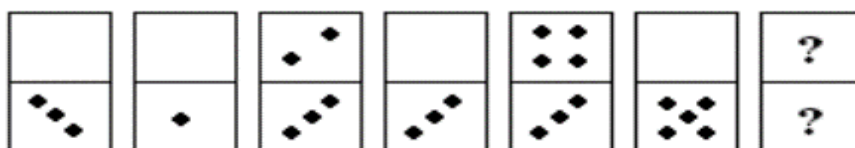


C

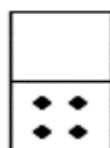


D

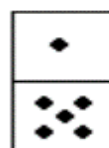
40



A



B



C



D

Answer Key

Test 1	Test 2	Test 3
1. B	1. A	1. A 31. A
2. C	2. E	2. C 32. E
3. D	3. D	3. C 33. B
4. B	4. A	4. B 34. D
5. A	5. D	5. B 35. C
6. A	6. E	6. A 36. B
7. C	7. C	7. D 37. D
8. D	8. A	8. B 38. B
9. D	9. E	9. C 39. D
10.C	10. E	10. D 40. A
11.A	11. E	11. B
12.B	12. C	12. C
13.C	13. D	13. D
14.A	14. B	14. A
15.B	15. C	15. C
16.A	16. D	16. C
17.C	17. D	17. B
18.A	18. C	18. B
19.A	19. D	19. D
20.B	20. E	20. C
	21. A	21. C
	22. C	22. D
	23. E	23. D
	24. E	24. E
	25. B	25. E
	26. A	26. D
	27. E	27. B
	28. C	28. A
	29. E	29. D
	30. E	30. A

Test 1 Explanation

1. The top circles are duplicated under it but in vertical position. The one missing is option b.
2. Top figures are symmetrical with the bottom figures. Option c is the answer.



3. The arrangement of top symbols is that symbol on the right side is moved to the outer leftmost side



4. The plane figures on top are duplicated and is put on top of each figure showing some left side part of the original figures. Option b.
5. The slanted plane figures on top are copied using another plane figure below it. The missing figure should be slanted left. Option a.
6. The arrows below are in opposite direction of the arrows on top. Option a.
7. The complete figures below are unshaded circles, wherein the middle is bigger in size so, the missing figure on top is a bigger shaded triangle. Option c.

8. Notice the movement of the symbols on top. Compare the middle symbols and left symbols. Swap the middle and left symbols. Option d.
9. The arrangement of alphabets on top of the missing letters is backwards 'TSR' only option d is arranged backwards. Option d.
10. The missing number is 7. The plane figure has 7 sides.
11. The letters 'X' and 'M' on top and below appears alternately. So the missing letter is 'X' and 'M', top and bottom respectively. The Letters 'LCT' is moving from left to right. Missing arrangement is 'TLC'. Option a.
12. The black small circles are increasing clockwise. Option b.
13. The three figures are rotated. Take note of the circle situated left 'arm' of the plane figure. So pick the figure which is a rotation of the figures and the circle is also on the left 'arm'. Option c.
14. The first and second figure appeared complete. The third figure has a bottom arrowhead missing. So the last figure should also appear the same. Option a.
15. Option b. The sides of the figures are increasing by 1 side.
16. The symbol inside the plane figure is an 'x' on the first figure and a cross on the next. Option a.

17. The third group of letters has reference to the first group. LLMM is re-arranged to MLLM. The last letter is moved to the first position. So middle group of letters LLMN becomes NLLM. Option c.
18. Every four letters are jumbled in some way but the fourth letter 'P' is next to its next letter on the alphabet 'Q', so the next fourth letter 'T' is next to letter 'U'. Option a.
19. First and second letters are same letters in big and small. The ending numbers are decreasing by 1. Option a.
20. Letters starting from 'A' and skipping the next three letters in the alphabets, that is the arrangement of the letters. Skip three letters from 'U' you get option c.

Test 2 Explanation

1. Option A is the odd one out. It's the only figure wherein the small circle is at the middle.
2. Option E is the odd one out. The triangles are not connected on its top tip.
3. Option D is the odd one out. The circle should be touching the line.
4. The tips of the curves are all touching the corner of the squares except fig A.
5. All triangles pointing downward are all shaded except the triangle in figure D.

6. The three small circles are close to each other except those in figure E.
7. All figures have small hexagon on the left leg and bigger hexagon on the right leg except those in figure C.
8. The plane figures are connected on the planes' tips except in figure A. It is connected on one side.
9. The small circles are either vertical or horizontal arrangement not diagonal like the one in figure E.
10. Only the tip of the curve in figure E is touching the side of the rectangle the others do not.
11. Figure E does not have an closed figure inside its square. Others are all rectangles.
12. Only the figure in C does not have a counterpart. The other 4 figures are pairs.
13. One side of the line is crossing a corner and a side of a square. But the line in figure D crosses two corners.
14. Only figure B is not of the same figure.
15. All figures are basic plane figures. Except C.
16. All figures are arranged by size except D.
17. The two circles are located on opposite sides of the line except for D.

18. All arrows have one head except for C.
19. Figure D is different among the other figures because of the long horizontal line which other figures don't have.
20. The triangles are connected on its top tips. Except E.
21. The numbers of circles on the top side of the line is less than the numbers of circles below the line except for A.
22. The number of lines inside the plane figures is less by 1 in the count of the sides of the plane except for C.
23. There are two heads for all arrows except for E.
24. The sticks are alternating 3s and 2s, it is only in figure E that has only one stick.
25. There are six circles inside the figure except for B which has only five.
26. The plane is standing up on the smaller side. Except for A.
27. All symbols are mathematical operators except for E.
28. The number of sides of the plane figures are all odd numbers except for C.
29. Only figure E has arrowheads on its line.
30. Only figure E has a plane figure others are three-dimensional figures.

Test 3 Explanation

1. A square is added each time and the color is inverted along. Option A.
2. The center circle is alternating between clear and solid. An extra line is added every second iteration. Option C.
3. The short line moves 45% clockwise with each iteration. The shape which appears in the top left moves to the bottom right, replacing any shape which already there. Another shape may or may not appear in the top left. Option C.
4. The same eight elements are arranged randomly in each figure. Option B is the only option which has these same eight elements.
5. The first figure is rotated through 90 degrees anticlockwise to produce the second figure. The second figure is then reflected in the vertical plane to produce the third figure. This sequence is repeated. Option B is correct as it is a reflection of the fourth figure in the vertical plane.
6. The black rectangle alternates between the top and bottom position and a white square is added with each iteration. Option A is the next figure in the series.
7. The horizontal line which forms part of the center cross alternates between short and long. Option D.

8. The figure is rotated by 90 degrees anti-clockwise and a square is transformed to white with each iteration. Option B is the next figure in the series.
9. Subsequent figures are rotated through 90 degrees anticlockwise and an increasing amount of the original color is inverted. Option C completes the sequence.
10. The horizontal line alternates between the left and right position. The vertical line alternates between 3 states top & bottom, bottom then top. Option D completes the series.
11. The operation involves a reflection in the vertical plane through the center of the figure. Option B.
12. There are three shapes in the figure. The two outer shapes are moved into the center to cover the shape already there. Option C.
13. The compound shape at the top rotates through 90 degrees. The large shape at the bottom moves to the top. The color of the small shape at the bottom is inverted. Option D is correct.
14. The white square moves one place anticlockwise. The black square moves one place clockwise. Option A is correct.
15. The square in the top left corner moves to the center. Any horizontal lines are duplicated and rotated through 90 degrees. Option C.

16. The figure is rotated through 90 degrees clockwise. Option C.
17. The figure is rotated through 90 degrees and the shaded and white squares are enlarged and brought into the center. Option B.
18. The thick vertical lines are rotated through 90 degrees, the square-within-square is moved to the opposite corner and the line is reflected in the vertical plane. Option B is correct.
19. The black squares move one place anticlockwise. Option D is correct.
20. The square moves to the center and the lines are duplicated and rotated through 90 degrees. Option C is correct.
21. Option C is the only figure in which opposite collared squares are on opposite sides of the line.
22. Adding the number of sides of the shapes in each figure gives eight, except for option D where it adds up to 5.
23. Option D is the odd one out. In other figures there is one more shaded square than there are not.
24. Option E is the odd one out. It is the only figure where there is a small black square adjacent to the large black square.

25. Option E is the odd shape out as it is a reflection, not a rotation, of the others.
26. Option D is the odd shape out as it is not a rotation of the others.
27. Option B is the odd one out. It is the only figure where the black and white square are not in opposite corners.
28. Option A is the odd one out. In the other figures the arrow points from a black to a white square.
29. Option D is the odd one out. In the other figures the black and white boxes are always opposite each other.
30. Option A is the odd shape out as it is a reflection, not a rotation, of the others.
31. Option A is the odd one out. The others are all either reflections or rotations of the same figure.
32. Option E is the odd one out as it is a reflection, not a rotation, of the others.
33. The top halves of the dominoes are in descending sequence 6, 5, 4, 3, 2, 1, blank. The bottom halves follow the descending sequence 2, 2, 1, 1, blank, blank, six. Alternate dominoes are then inverted. Option B.
34. The top halves of the dominoes follow the sequence 3, Blank, 3, blank, etc. The bottom halves follow the ascending Blank, 1, 2, 3, etc. Alternate dominoes are then inverted. Option D completes this sequence.

35. The top halves of the dominoes repeat the sequence 5, 3, 1. The bottom halves repeat the sequence 2, 4, 6. Alternate dominoes are then inverted. Option C completes this sequence.
36. The top halves of the dominoes repeat the sequence 4, 2, etc. The bottom halves repeat the sequence 5, 5, 4, 5, 3, 5, etc. Alternate pairs of dominoes are then inverted. Option B completes this sequence.
37. Every alternate domino is a 1 and 6, these can be ignored. The remainder follow a descending pattern of 5, 4, 3, 2 and a repeating pattern of blank, 1, blank, 1. Every other one of these is inverted. Option D continues this series.
38. Every other domino follows a descending pattern 4&6, 4&5, 4&3, 4&2. Option B continues this series.
39. The top halves of the dominoes have the descending sequence 2, 1, Blank, six, five, etc. The bottom halves have the ascending sequence 5, 6, Blank, 1, 2, 3, etc. Alternate dominoes are then inverted. Option D completes this sequence.
40. The top halves of the dominoes have the ascending sequence blank, 1, 2, 3, etc. The bottom halves have repeat the sequence 3, blank, 3, blank, etc. Alternate dominoes are then inverted. Option A completes the sequence.